

REMARKS

Claims 1-28 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Demetrescu et al. (US 6,647,262 B1, Lucent, previously cited) in view of Lee et al. (US 2002/0150084 A1, Samsung, newly cited). This rejection is respectfully disagreed with, and is traversed below.

It is first noted that a new independent claim 29 was added in the last response, and the fee was paid for the additional claim. However, the Examiner has not mentioned claim 29 in the most recent office action. The Examiner is respectfully requested to consider claim 29 and to ensure that this claim is entered into this application.

The Examiner now admits that Demetrescu et al. do not disclose "determining if a location procedure is ongoing in the mobile station and, if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller", as in claims 1 and 15. It is noted that claim 29 contains somewhat similar subject matter.

However, the Examiner now uses Lee et al. for purportedly teaching in paragraphs [0082]-[0085] this subject matter.

What Lee et al. disclose in these paragraphs is as follows (note also the introductory text from paragraph [0081]):

"[0081]... The signal processing shown in FIG: 5 occurs when a source RNC in which an MS is registered before a SRNS relocation generates an MS relocation request in the presence of traffic being transmitted or received from or at the MS. **This is termed SRNS relocation.**

[0082] **If the MS requests an SRNS relocation while transmitting or receiving traffic by an assigned PDP address in step 1**, a source RNC transmits a Relocation Required message to an old SGSN server in step 2. The old SGSN server transmits a Forward Relocation Request message to a new SGSN server in step 3. The new SGSN server transmits an ADD Request message notifying

that the MS location is changed to a new S-MGW via the signaling interface Mc shown in FIG. 2 in step 4. After updating the MS location information, the new S-MGW transmits an ADD Response message for the ADD Request message to the new SGSN server via the signaling interface Mc in step 5. The new SGSN server transmits a Relocation Request message requesting SRNS relocation of the MS to a target RNC to which the MS moves in step 6. The target RNC performs a predetermined process of accessing a channel to provide a packet service to the MS. If the packet service is available to the MS, the target RNC transmits a Relocation Request Acknowledge message to the new SGSN server in step 7. In step 8, the new SGSN server transmits a Forward Relocation Response message for the Forward Relocation Request message to the old SGSN server. The old SGSN server transmits a Relocation Command message to the source RNC, requesting SRNS relocation to be performed, in step 9. Then, the source RNC transmits a Relocation Commit message to the target RNC, notifying that the Relocation Command message has been received from the packet-switched domain in step 10. The source RNC forwards data to the target RNC in step 11. The target RNC transmits a Relocation Detect message to the new SGSN server, notifying that the relocation has been detected in step 12. **After having sent the Relocation Detect message, target SRNC responds to the MS by sending a RNTI Reallocation message in step 13.** In step 14, the new SGSN server transmits an Update PDP Context Request message to the GGSN server so that the GGSN server updates the location information of the MS with information indicative of the MS moving from the source RNC to the target RNC. The GGSN server updates the location information of the MS and then transmits a MODIFY Request message to the G-MGW, requesting update of the MS location information in step 15. The G-MGW updates the MS location information and transmits a MODIFY Response message for the MODIFY Request message to the GGSN server in step 16. The GGSN server transmits an Update PDP Context Response message for the Update PDP Context Request message to the new SGSN server in step 17.

[0083] In step 18, the new SGSN server transmits a MODIFY Request message requesting the update of the MS location information to the new S-MGW. After the MS location information update, the new S-MGW transmits a MODIFY Response message for the MODIFY Request message to the new SGSN server in step 19.

[0084] **When the MS location information is completely updated in the above procedure, the MS requests release of existing channels to the old SGSN server in steps 20 through 24.** The old SGSN server transmits a SUBTRACT Request message requesting release of an existing call to the old S-MGW in step 25. In step 26, the old S-MGW transmits a SUBTRACT Response message for the SUBTRACT Request message to the old SGSN server, thereby terminating the SRNS relocation.

[0085] As described above referring to FIG. 5, steps 4, 5, 15, 16, 18, 19, 15 and 26 are additionally performed to process signals between the separated elements SGSN server and S-MGW and between the separated elements GGSN server and G-MGW for SRNS relocation (handover) in the embodiment of the present invention."

Referring also to Figure 5, it can be seen that at step 1 there a decision is made to perform the SRNS (Serving Radio Network Subsystem) relocation for the MS, at step 13 the MS is informed by the target Radio Network Controller (RNC) of the Radio Network reallocation, and at step 20 the MS sends the target Radio Network Controller the Radio Network Reallocation Complete message.

Significantly, all of the remaining steps shown are those performed in the radio network(s), i.e., steps performed external to the MS. Those steps that are mobile station-specific (apparently 1, 13 and 20) clearly do not suggest the claimed subject matter to one skilled in the art.

It is thus not understood how the Examiner finds in this disclosure of Lee et al. any subject matter that would suggest to one skilled in the art at least those elements of the independent claims, as in claim 1:

upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, **determining if a location procedure is ongoing in the mobile station; and**

if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller;

or as in claim 15 where a mobile station includes:

a controller in said mobile station, responsive to an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, for

determining if a location procedure is ongoing in the mobile station and, if it is, for completing the location procedure and for reporting measurement results in a message transmitted from the mobile station to a target radio network controller;

or as in claim 29, where a computer program product causes a data processor to operate with a wireless network comprising operations of:

responsive to an occurrence of a Radio Resources procedure comprising at least one of Handover and Cell Re-selection, **and if a Location Services procedure has been started in a mobile station, completing the Location Services procedure; and**

sending result information regarding the completed Location Services procedure results to a target Radio Network Controller.

The SRNS Relocation procedure of Lee et al. clearly does not disclose or suggest this subject matter, and therefore even if the Lee et al. structure/procedure were somehow combined with the Demetrescu et al. structure/procedure, the resulting combination (which is not admitted is suggested or workable) would still not suggest the claimed subject matter to one skilled in the art, and thus neither would the proposed combination render unpatentable the independent claims 1, 15 and 29.

The foregoing is true at least for the reason that Lee et al. (as well as Demetrescu et al.) do not appear to appreciate that a problem may exist with regard to premature termination of a LCS procedure due to an occurrence of some RR procedure, and thus Lee et al. (with or without Demetrescu et al.) also do not provide a solution for this problem.

Further, the Examiner refers to Lee et al. teaching "Core network separation structure and signal processing method thereof in mobile communication system". It is not understood what this has

S.N.: 10/043,926
Art Unit: 2683

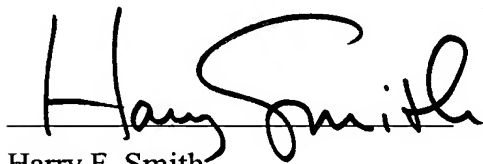
to do with the claimed invention, or what makes this an "analogous art" to Demetrescu et al.

In that it has been shown that the independent claims are all clearly patentable over the proposed combination of Demetrescu et al. and Lee et al., then at least for this one reason alone all of the dependent claims are patentable as well

The Examiner is respectfully requested to reconsider and remove the rejection of claims 1-28.

A favorable consideration that also results in the allowance of claims 1-28, as well as claim 29, is earnestly solicited.

Respectfully submitted:



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7/5/2005
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S.N.: 10/043,926
Art Unit: 2683



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